

CHICAGO
Electric Power Tools

40 Gallon Parts Washer

Model 41108

Assembly & Operating Instructions



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For technical questions and replacement parts, please call 1-800-444-3353.

MODEL # 41108 PARTS WASHER SPECIFICATIONS

Capacity:	40 Gallons
Pump Capacity:	30 Gallons per Hour
Pump Power Supply:	115 V AC / 60Hz / Single Phase 3-prong grounded plug, non-polarized 18 GA cord x 48" Length
Tub Dimensions:	42-1/4"L x 19-1/2"W x 10-1/2"D
Overall Dimensions:	45-1/2"L x 21-1/4"W x 35"H
Construction:	18 GA Sheet Steel, Painted
Fusible Link:	Under 158 degrees F

INCLUDED ACCESSORIES

1. Parts Basket
2. Parts Table
3. Drain Plug
4. Removable Pumping Unit
5. Fusible Link Safety System

PRODUCT FEATURES

1. Provides a convenient cleaning station for soaking, scrubbing and rinsing parts.
2. High volume pump delivers 30 gallons per hour.
3. Convenient parts basket prevents loss of small parts in the tub while soaking or rinsing.
4. Drain Plug facilitates draining and cleaning of tub.
5. Fusible link safety systems automatically closes cover, smothering flame in event of fire.

SAVE THIS MANUAL

You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep both this manual and your invoice in a safe, dry place for future reference.

NOTICE

The Warnings, Cautions, and Instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAFETY WARNING & CAUTIONS

READ ALL INSTRUCTIONS BEFORE USING THIS TOOL!

1. **KEEP WORK AREA CLEAN.** Cluttered areas invite injuries.
2. **OBSERVE WORK AREA CONDITIONS.** Do not use tools in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered equipment in the presence of flammable gases or liquids.
3. **KEEP CHILDREN AWAY.** Children must never be allowed in the work area. Do not let them handle machines, tools, or equipment.
4. **STORE IDLE EQUIPMENT.** When not in use, keep the cover closed to prevent contamination or spilling of the cleaning solution.
5. **DO NOT FORCE THE TOOL.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool's capacities.
6. **USE THE RIGHT TOOL FOR THE JOB.** Do not use a tool for a purpose for which it was not intended.
7. **DRESS PROPERLY** Do not wear loose clothing or jewelry, as they can be caught in moving parts. Non-skid footwear is recommended. Wear restrictive hair covering to contain long hair. Always wear appropriate work clothing.
8. **USE EYE, EAR AND BREATHING PROTECTION.** Always wear ANSI approved impact safety goggles if you are producing metal filings or wood chips. Wear an ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Use ANSI approved ear protection when working in a loud or noisy environment.
9. **DO NOT ABUSE THE POWER CORD.** Protect the power cord from damage, either from impacts, pulling or corrosive materials. Do not yank machine's cord to disconnect it from the receptacle. Do not use an underrated extension cord.
10. **DO NOT OVERREACH.** Keep proper footing and balance at all times. Do not reach over or across running machines.
11. **MAINTAIN TOOLS WITH CARE.** Inspect power cord periodically and, if damaged, have it repaired by an authorized technician. Control handle and power switch must be kept clean, dry, and free from oil and grease at all times.
12. **AVOID UNINTENTIONAL STARTING.** Be sure that you are prepared to begin work before turning the start switch on.
13. **STAY ALERT.** Watch what you are doing. Do not operate this machine when you are tired.
14. **DO NOT OPERATE THIS MACHINE WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS, OR PRESCRIPTION MEDICINES.**

15. CHECK FOR DAMAGED PARTS. Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts, any broken parts or mounting fixtures, and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn on and off properly.
16. REPLACEMENT PARTS AND ACCESSORIES. When servicing, use only identical replacement parts, which are available from Harbor Freight Tools. Use of any other parts will void the warranty.

SPECIAL WARNINGS WHEN USING THIS PARTS WASHER

1. Never use any flammable solvents in this tub.
2. Never use any solvents which create hazardous fumes. Use water and household detergents only.
3. Always wear ANSI-approved eye protection when using this parts washer.
4. Whenever possible, clean parts in the parts basket to prevent loss within the tub.
5. Prolonged exposure to cleaning fluids can harm your skin. Wear appropriate safety gloves when using this washer.
6. Keep your work area clean and uncluttered to prevent loose materials from falling into and becoming lost in the tub.
7. Keep cover closed when not in use.
8. Never use the cover or tub as a work stand or bench top. This may cause damage to the Cover, Tub or Pump.
9. Keep children and unauthorized persons away when using this parts washer
9. Never leave the parts washer unattended where children or unauthorized persons can use it without supervision.
10. Be careful to route the power cord safely. Protect it from being damaged by other equipment in the shop. Do not route the cord where it can be walked on or tripped over.
11. If you use an extension cord, refer to the chart in this booklet for correct gauge and length.

MAINTENANCE

1. Use only an approved cleaning solution.
2. Keep the filter clean, and replace the cleaning solution when it becomes dirty.
3. Do not operate the Parts Washer with a very low cleaning solution level.
4. Remove the Drain Plug (#19) to empty the Tub. *Note: You may wish to install an elbow and flexible hose to the drain to more easily drain the cleaning solution into a container.*
5. After draining, wipe out the Tub to remove dirty sediments before refilling.
6. Dispose of dirty cleaning solution properly, in accordance with local regulations.
7. Protect the Steel Tub from rust damage by keeping it clean, and repainting scratches periodically.

SET UP AND ASSEMBLY

Locate the Parts Washer conveniently and safely.

1. Locate this Parts Washer where you can easily reach it, and work with it in the shop.
2. Locate the Parts Washer where it is not at risk of being damaged, struck or tipped over by other tools and equipment.
3. Remember that you will periodically have to drain and replace the fluid. Locate the washer in an area that may be conveniently accessed to replace the cleaning solution.

Electrical Limits and Warnings

1. If using an extension cord, observe the minimum gauge requirements found in the following chart:

AMP RATING	Total Extension Cord Length in Feet							
	25	50	75	100	125	150	175	200
0-10	18	18	16	16	14	14	12	12
10.1-13	16	16	14	14	14	12	12	12
13.1-15	14	14	12	12	12	12	12	--

Use only UL approved extension cord.

2. Avoid wet conditions when using electrical equipment.
3. Use only a grounded outlet with appropriate breaker switch in-line.
4. Always inspect power cords and extension cords for damage before use. Never plug in a power cord that is not in good condition.
5. Harbor Freight Tools can supply UL listed and outdoor rated power cords in various AWG gauge ratings as needed.

ASSEMBLY

You must assemble the Legs and Shelf to the Tub, and put the Pump, Work Shelf and Basket in place.

1. Remove the machine from the carton and inspect for any possible damage.
2. Remove parts from inside machine.
3. Place clean cardboard on the floor, and lay the parts washer upside down on the cardboard.
Be sure to hold cover in place when turning over to prevent damage to the cover.
4. Mount the four Legs (#21) onto the brackets on the underside of the Tub (#01), using the Pan Screws (#22), Spring Washers (#23), and Nuts (#24). *Do not fully tighten.*
5. Position the Shelf (#20) between the Legs with the flat side down, and attach to the mid point of the Legs using Screws, Washers and Nuts (#22, 23 and 24). *Tighten all fasteners on the Leg assembly securely.*
6. Return the Parts Washer to its upright position.
Be careful to hold the Cover in place while turning it over.
7. Place the Work Shelf (#42) and Parts Basket (#44) into the tub.
8. Mount the Pump Assembly into the slot in the right side of the Tub. Be sure the tab on the side of the Pump Housing (#25) slides securely into the slot.
9. Place the Screen (#40) and Cover Screen (#41) Assembly onto the Pump Housing Cover (#39).
10. Fill the Tub with an approved cleaning solution. *Do not overfill. Remember that you will be adding volume by placing parts into the Tub. Close cover when you are agitating parts.*
11. Plug Power Cord into a grounded 110-115V outlet.

OPERATION

Use only Approved Cleaning Solutions

1. Water mixed with household detergent is approved.
2. **NEVER USE HIGHLY VOLATILE FLAMMABLE SOLVENTS, SUCH AS GASOLINE, TOLUENE, KEROSENE, DIESEL FUEL, ETC. Serious risk of fire, explosion and personal injury may result.**
3. **WARNING: The Pump may be damaged if you attempt to use non-approved solvents.**

Unattended Washing (Agitating) parts

1. You can position parts on the Work Shelf or in the Basket, and allow the cleaning solution to wash them by positioning the Flexible Pipe appropriately.
2. Keep the cover closed to prevent splashing of the cleaning solution or other hazard.
3. Do not allow the Parts Washer to agitate unattended for long periods of time. You must periodically check to assure that the pump is functioning properly and that there is no hazard.

Never operate this parts washer if:

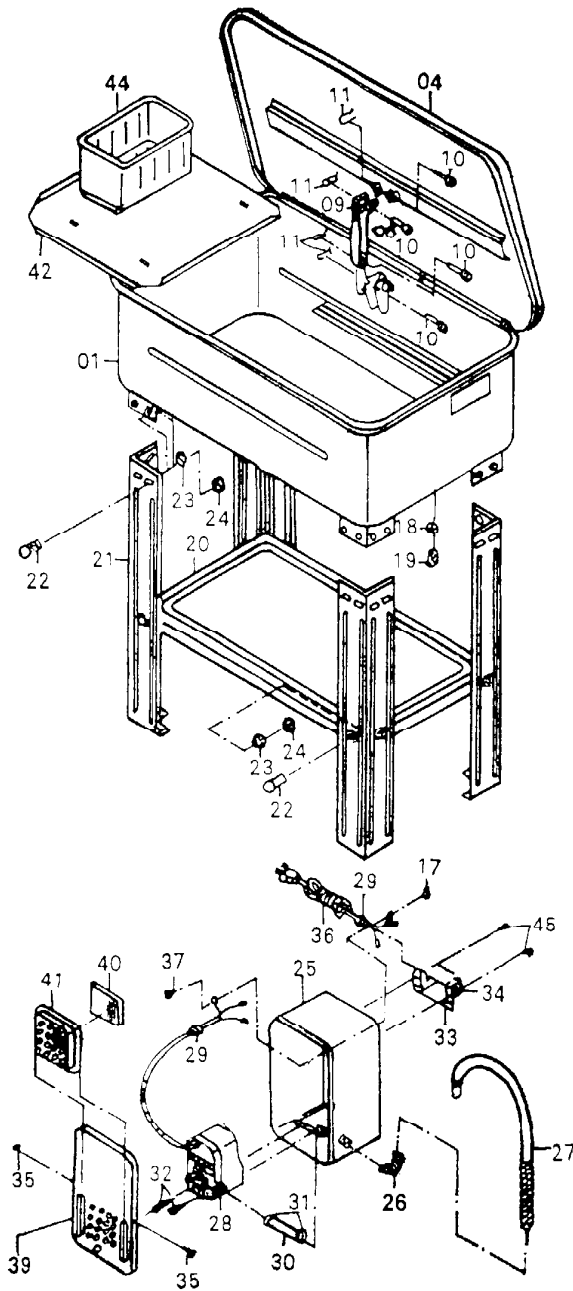
1. The Filter Screen is clogged or dirty. Remove and clean this screen periodically.
2. The cleaning solution is very dirty. Change the detergent mixture periodically to provide maximum cleaning ability, and reduce clogging of the filter.
3. The fluid level is very low. Do not allow the Pump to operate if the fluid level is very low. This may cause the pump to run dry, resulting in damage to the pump.
4. There is an apparent Electrical or Fire hazard. Never turn on the pump if you observe a potential electrical, fire or other hazard.
5. The Fusible Link of the Safety Plate is not intact. Assure that this critical safety device is in good condition before using the Parts Washer. Replace if necessary.
Replacement Fusible Link Safety Plates are available from Harbor Freight Tools.

TROUBLE SHOOTING

If you experience low flow or no flow of cleaning solution, check the following:

1. The Filter may be clogged. Clean the Filter Screen (#40) and Filter Cover Screen (#41). If the Filter is damaged, replace it.
2. A foreign object may have become lodged in the Flexible Pipe. Unscrew the Flexible Pipe (#27) from the Elbow (#26) and check it by shining a light through it, or using a probe, such as a piece of wire, to inspect it.
3. The Pump may not be receiving power. Check the power cord to be sure it is plugged in. Check the Breaker Switch for the power supply to be sure it has not kicked out. If so, check for the error condition that caused it to break before resetting it.
4. The Pump may be jammed or burned out. Listen for the sound of the pump. You should be able to determine if it is attempting to turn, or if it is silent. If silent, it must be replaced. If attempting to turn, ask a qualified electrician to remove the jammed article from it.
WARNING: Do not attempt electrical repairs in the presence of a liquid cleaning solution. Do not attempt electrical repairs if you are not a qualified electrician.

PARTS DIAGRAM AND LIST #41108 PARTS WASHER



<u>Part #</u>	<u>Description</u>	<u>Quantity</u>
01	Tub	1
04	Cover	1
06	Safety Lever (Not Shown)	1
09	Safety Plate	1
10	Pin	4
11	Spring Pin	4
17	Nut	1
18	O-Ring	1
19	Drain Plug	1
20	Shelf	1
21	Leg	4
22	Pan Screw m6 x 12	24
23	Spring Washer	24
24	Nut m6	24
25	Pump Housing	1
26	Elbow	1
27	Flexible Pipe	1
28	Pump	1
29	Feed Through	2
30	Hose	1
31	Hose Clamp	2
32	Tapping Screw	2
33	Switch Box	1
34	Switch	1
35	Tapping Screw	2
36	Power Cord	1
37	Pan Screw	1
39	Pump Housing Cover	1
40	Filter Screen	1
41	Filter Cover Screen	1
42	Work Shelf	1
43	Work Shelf Leg	2
44	Basket	1
45	Tapping Screw	2

PLEASE READ THE FOLLOWING CAREFULLY

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